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REMARKS

The Present Invention and the Pending Claims

The present invention pertains to an adhesive composition for application to skin. Claims 1-16 are currently pending.

The Amendments to the Claims

Claims 7 and 15 have been amended to point out more particularly and claim more distinctly the present invention. The amendments to claims 7 and 15 are supported by the specification at, for example, page 9, lines 2-5. Accordingly, no new matter has been added by way of these amendments. Separate documents setting forth the amendments to the claims, as well as the text of all of the pending claims, as amended, are enclosed.

Summary of the Office Action

The Office has maintained the rejection of claims 1-16 under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Shirai et al. (U.S. Patent 5,543,151). Reconsideration of these rejections is respectfully requested.

Discussion of Rejections

The adhesive composition of the present invention comprises as one element an acrylic copolymer obtained from a monomer mixture containing three components: (A) (meth)acrylic acid alkyl ester monomer, (B) an alkoxy group-containing ethylenically unsaturated monomer, and (C) a carboxy group-containing ethylenically unsaturated monomer. When an acrylic copolymer prepared from a monomer mixture of all three components is used to prepare an adhesive composition, the resulting adhesive composition has a high moisture permeability allowing skin to remain dry and allowing the adhesive composition to remain adhered to skin that is wet with perspiration (see, e.g., page 4, lines 6-17). Additionally, such an adhesive composition reduces irritation to the skin (see, e.g., page 4, lines 6-17).

Shirai et al. similarly seeks to provide an adhesive composition that is less irritable to the skin and shows fine adhesion to the skin. However, Shirai et al. does not describe the problems associated with using an adhesive composition on skin during excessive perspiration or aim at solving these problems, as does the present invention. The present invention is predicated on the need for an adhesive composition having superior adhesion to the skin during perspiration (see, e.g., page 2, lines 19-22). The present invention provides such an adhesive composition by imparting hydrophilicity to the acrylic polymer and vapor permeability and hygroscopicity to the adhesive composition. Specifically, the present invention requires the use of an alkoxy group-

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containing ethylenically unsaturated monomer (B) as an essential component in the adhesive composition in order to improve adhesion to the skin during excessive perspiration.

Shirai et al. merely teaches that the acrylic polymer can be "a polymer or a copolymer comprising a (meth)acrylic acid ester as a main component, if necessary, copolymerized with a monomer copolymerizable with the (meth)acrylic acid ester" (column 2, lines 34-38). Shirai et al. recites, in a long list, numerous monomers that can be copolymerizable with the (meth)acrylic acid alkyl ester (corresponding to (A)) (see column 2, line 53 - column 3, line 15). The monomers recited in Shirai et al. in that long list include an alkoxy group-containing ethylenically unsaturated monomer (corresponding to (B)) and a carboxy group-containing ethylenically unsaturated monomer (corresponding to (C)). Thus, Shirai et al. discloses many individual components that can be mixed and matched, and indeed Shirai et al. indicates that the monomers can be used alone or as mixtures (see column 3, lines 16-17).

While Shirai et al. discloses the individual components (A), (B), and (C), Shirai et al. does not specifically disclose an acrylic copolymer obtained from all three components (A), (B), and (C), as recited in the pending claims. Nor does Shirai et al. disclose that the inclusion of an alkoxy group-containing etheylenically unsaturated monomer (B) is an essential element of the adhesive composition. None of the examples disclosed by Shirai et al. provides an acrylic copolymer prepared from three different types of monomers, let alone an acrylic copolymer prepared from the particular three components (A), (B), and (C). Based on the long list of monomers that can be copolymerized with (meth)acrylic acid as disclosed by Shirai et al., one of ordinary skill in the art would not consider Shirai et al. as disclosing the acrylic copolymer obtained from the combination of components (A), (B), and (C) as recited in the pending claims. Under the circumstances, the present invention cannot properly be considered to have been anticipated by Shirai et al.

In addition, there is nothing in Shirai et al. that would direct or motivate that same person of ordinary skill in the art to single out the specific monomers (B) and (C) to combine with component (A) in order to provide an acrylic copolymer as recited in the pending claims. As described above, the inclusion of an alkoxy group-containing ethylenically unsaturated monomer (B) in the adhesive composition is essential in order to improve adhesion to the skin during excessive perspiration. However, Shirai et al. does not describe or suggest the problems associated with using an adhesive composition during excessive perspiration or aim at solving these problems. Thus, after reading Shirai et al., one of ordinary skill in the art would not be motivated to pick and choose among the numerous monomers listed in column 2, line 53 – column 3, line 14 to create the adhesive composition of the present invention to be used during excessive perspiration. As described in the previous Response to Office Action, the only way in which Shirai et al. can be considered as teaching or suggesting the acrylic copolymer

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obtained from the combination of components (A), (B), and (C) is through the use of impermissible hindsight, i.e., with the knowledge of the present application and the invention as claimed therein. The use of such hindsight, of course, cannot serve as a proper basis for an obviousness rejection.

In view of the failure of Shirai et al. to direct one of ordinary skill in the art to the particular combination of elements necessary to arrive at the present invention, and in view of the unexpected properties attendant the particular combination of elements of the present invention, the present invention must be considered to be unobvious over Shirai et al.

Since the subject matter of the pending claims is both novel and unobvious, and therefore patentable, in view of Shirai et al., the anticipation and obviousness rejections based thereon should be withdrawn.

Conclusion

The application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

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I hereby certify that this "Response to Office Action" and all accompanying documents are being deposited with the United States Postal Service "Express Mail Post Office To Addressee" Service under 37 CFR 1.10 on the date indicated below and is addressed to: Commissioner for Patents, Washington, D.C. 20231.

Rick D. Madsen

Name of Person Signing

Signature

February 27, 2003

Date